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Monthly Statistical Report

Finance, Accounting, and Statistics Department

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SUMMARY

Extraordinary cold helped push January's total deliveries up by a surprisingly large 11.7 percent—an increase of nearly 2 million B/D. This contrasted sharply with the existing underlying trend in consumption, with growth for all of last year amounting to less than one percent. Unusually warm weather a year ago had contributed to deliveries then being about half a million B/D below trend, serving to make this January's year-to-year increase even larger.

The greatest percentage increase in deliveries among the major products by far was for distillate fuel oil, which jumped more than 900 thousand B/D or roughly 30 percent from last January. Sub-zero temperatures in the latter part of the month, combined with colder weather for the month over all, put the Northeast at roughly 15 percent colder than normal. Compared with last January, the weather in the Northeast, where nearly 80 percent of U.S. heating oil consumption takes place, was nearly 35 percent colder. Strong demand from electric utilities short on natural gas and facing extremely high electricity demand boosted distillate consumption further. Even with the unusual cold and continued underlying consumption growth for highway and other uses, January's increase was surprisingly large. Estimated consumption increases account for at most half a million B/D of distillates' year-to-year change.

Residual fuel oil deliveries were also boosted by over 12 percent by heating and electric utility demand spurred by the cold weather. Kerosine jet fuel deliveries rose 8.4 percent, also partly because of strong demand for blending with distillate to improve cold-weather properties. Although inclement weather most likely hampered travel and moderated gasoline consumption, deliveries of that product rose a larger-than-usual 3.5 percent.

At refineries, inputs rose 2.9 percent and distillate production surged over 11 percent versus last January, as yields shifted towards products in greatest demand. And while total deliveries were rising strongly, imports for January declined 1.7 percent, year to year, with the difference largely made up from inventory. Out of the month's unusually large stock draw of 44 million barrels, more than half was distillate fuel oil. Following their 26 million barrel decline, month-end distillate stocks of 119 million barrels were still only slightly below the recent-year average for January because they had started the month at a higher than usual level.

Meanwhile, the Northridge earthquake shut down some West Coast crude oil pipelines for periods of a few days up to several weeks, but otherwise did not result in many serious problems for petroleum operations on the West Coast. Power outages and other temporary problems slowed operations at some refineries, though little serious damage was reported. As a precaution, offshore operations had been temporarily slowed or shut down as well.

PRODUCT SUPPLIED

Gasoline

DELIVERIES RISE MORE THAN LIKELY CONSUMPTION.

Gasoline deliveries for January increased an unexpected 3.5 percent versus the same month last year. Not only was this more than double last year's average growth rate of 1.5 percent, but the month's inclement weather compared with last January would have been expected to have put a damper on actual consumption during the month. Consumption growth of 1 to 1.5 percent would appear more plausible.

With winter oxygenate requirements covering more regions than last season, oxygenated gasoline deliveries rose by 25 percent to nearly 2.1 million B/D from 1.6 million last January. This put oxygenated gasoline's share at nearly 30 percent of deliveries for the month, up from about a quarter of deliveries a year ago. Meanwhile, Federal Highway Administration data continue to indicate strengthening in highway travel. November's 3.7 percent year-to-year increase was the largest so far for last year, though we estimate that the current trend is a slightly lesser 3 percent. With the impact of continued efficiency gains estimated at around 1.5 percent, this suggests that the trend in underlying consumption growth for gasoline has been running at around 1.5 percent in recent months.

API ESTIMATES

	JANUARY	
	Million B/D	Percent Change
Total domestic deliveries	18.2	11.7
Crude production	6.9	0.0
Total imports	7.8	(1.7)
Stocks (million bbl)	1,031	(0.5)

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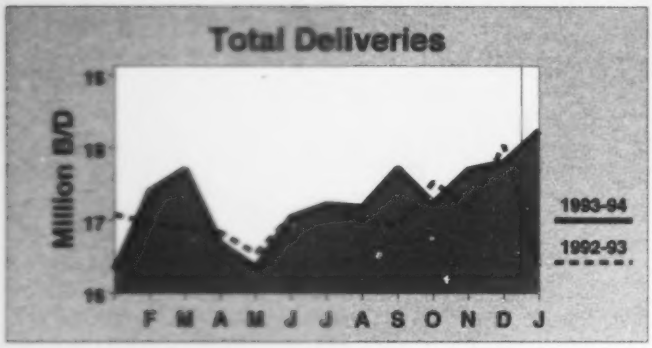
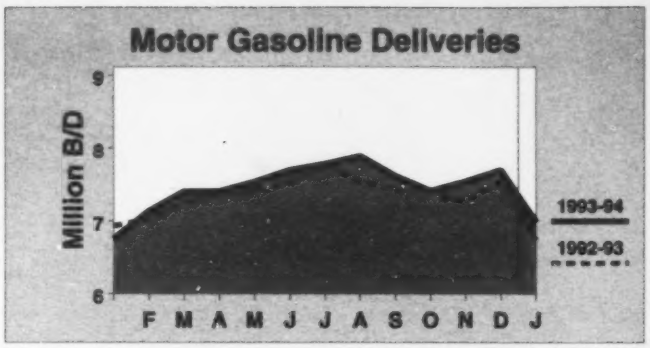
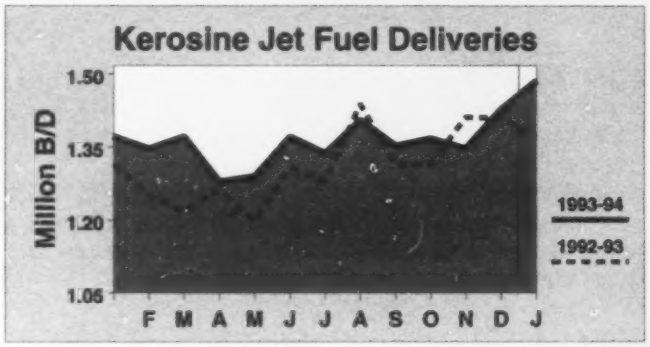






Distillate Fuel Oil

SEVERE COLD BOOSTS DEMAND.

Extremely cold weather in mid-month, with daily lows falling to sub-zero levels in many parts of the Northeast and Midwest, helped to push distillate deliveries to over 4 million B/D in January. This was an increase of roughly 30 percent, or 950 thousand B/D, over levels of a much milder January a year ago. Even after accounting for the direct and indirect effects of the cold, however, the year-to-year increase still appears larger than might have been expected.

In the Northeast, the month as a whole averaged roughly 15 percent colder than normal and 35 percent colder than last January. Heating degree days for the month nevertheless fell slightly short of those recorded during the unprecedented cold experienced in the region in December 1989.

As much as half a million B/D of distillate deliveries' increase could be attributed to increased consumption. In addition to a surge in heating oil demand, electric utilities experienced extremely heavy demand for electricity at a time when natural gas was often being diverted to residential customers, resulting in heavy usage of diesel-powered peaking units. The combined effect of strong heating demand and electricity utility consumption on the year-to-year comparison could easily have been as much as 400 thousand B/D. Another 100 thousand B/D can be attributed to ongoing growth in diesel demand. Although the inhospitable weather may have slowed truck and rail traffic, a greater need to keep diesel engines idling in very cold weather likely offset this.

Changes in tax collection procedures went into effect January 1, but provide little further explanation for January's unusually strong deliveries. It is possible that some distributors may have sought to minimize inventories of un-dyed tax-exempt fuel at the beginning of the month to avoid paying the floor tax. However, any major postponement of deliveries from December into January would have shown up in "unusually low" deliveries for December, which was not the case.

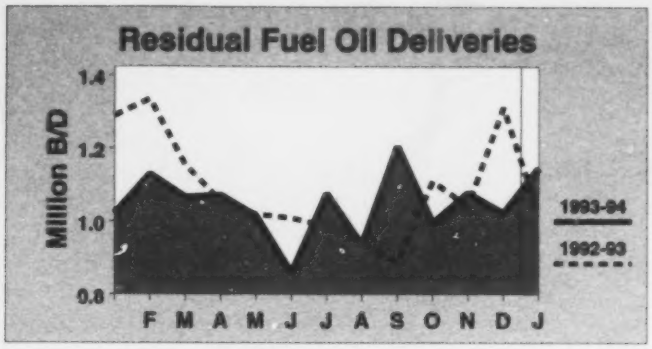
Kerosine Jet Fuel

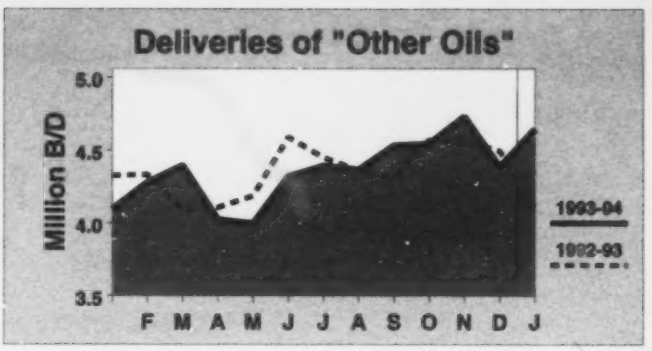
BLENDING, MILITARY SHIFT ADD TO DELIVERIES.

Deliveries of kerosine jet fuel during January increased by 115 thousand B/D, or 8.4 percent, over the same period of 1993. Aside from the 1.54 million B/D peak in December 1989, this month's deliveries were at an all-time high. While growth in deliveries surpassed the estimated growth in miles flown on commercial airlines, increased incremental blending with diesel fuel and military deliveries are believed to be largely responsible for this month's year-to-year growth.

Because this January's extreme cold affected such a large portion of the country and was so severe, the need for blending jet-kerosine into diesel was increased. With winter's colder temperatures, such as the sub-zero temperatures that were experienced during the height of the cold snap, diesel fuel can begin to cloud, or crystallize. Once the diesel fuel starts to crystallize, starting problems and stalling can occur. In order to prevent these problems, kerosine or jet-kerosine is blended into the diesel. Based on historical data, we estimate that approximately 150-200 thousand B/D of jet fuel deliveries can be diverted to blending during a typical January. However, if the weather conditions are more severe, as was the case during this January, the amount of jet-kerosine for blending is believed to increase.

The severe cold and ice resulted in several airport closings and caused some airlines to cancel as much as 5 percent of their scheduled flights. Nonetheless, preliminary estimates of miles flown by commercial airlines during January showed only a slight 1 percent decline compared to a year ago. In addition, air cargo miles, of which approximately half are independent of passenger traffic, increased by 5-6 percent between this January and last.





Based on these indicators, it appears that commercial airline consumption, and thus jet fuel deliveries, remained relatively flat with the same period a year ago.

Deliveries to the military also continued to increase. Preliminary data from the Defense Fuel Supply Center indicated deliveries of jet fuel to the military averaged 126 thousand B/D during December. This represented a year-to-year increase of nearly 70 percent, or approximately 50 thousand B/D and is a reasonable estimate of the increased military use in January.

Residual Fuel Oil

HEAVY ELECTRICAL DEMAND REVERSES RESID'S DECLINE.

January deliveries of residual fuel oil increased by 12.4 percent, or 126 thousand B/D, year-to-year. With the month's colder-than normal temperatures, the demand for electricity output for heating needs rose which helped boost resid deliveries. The price of resid continued to maintain a price advantage vis-a-vis natural gas, and may have encouraged incremental purchases by both electric utilities and industrial users.

In the three areas of the country that use resid intensively, the extremely cold weather resulted in significant increases in the demand for electricity output. Electricity generation in New England and the Mid-Atlantic showed increases of 8.9 and 11.7 percent, respectively, between this January and last. In Florida, where the number of heating degree days more than doubled between this January and that of a year ago, electricity output is estimated to have increased by 14-16 percent. Also encouraging resid consumption by electric utilities were the natural gas curtailments in the Northeast. Because colder weather increases residential and commercial demand for heating, natural gas deliveries to electric utilities and industrial users may be interrupted. Under these conditions, it is not unusual for electric utilities to significantly increase resid-burn. Since January's cold snap was nearly as severe as the one in December 1989, electric utilities could have increased resid-fired generation by at least 100 thousand B/D.

For the month, resid prices were significantly lower than the city gate price of natural gas in several Atlantic seaboard markets. In Boston and New York, for example, city gate prices of natural gas exceeded $3.00 per million BTU during the course of the month compared to peak resid prices of $2.58 and $2.87 per million BTU, respectively. Given resid's strong price advantage and the natural gas curtailments that occurred during January, it is likely that both electric utilities and industrial users chose to increase their incremental purchases of resid.

Other Oils

DELIVERIES JUMP.

Deliveries of "other oils" rose a substantial 13.4 percent over last January. Colder weather this year than last no doubt contributed at least a portion of the sizable increase in the form of strong demand for LPGs for heating use. Also partly responsible were deliveries of "other oils" last year below trend by perhaps 200-300 thousand B/D. Even had year-ago deliveries been more in line with the then-existing trend, deliveries this year would still have risen 6 to 8 percent.

SUPPLY

Production

CRUDE OIL OUTPUT FLAT VERSUS LAST JANUARY.

Domestic crude oil production was flat in January—the first month without a year-to-year decline in more than two years. Alaskan production rose for the first time since late 1991, increasing 1.5 percent versus last January. Production's decline there has been slowed, at least temporarily, since October, when the latest gas-handling installation came onstream on the North Slope and Point McIntyre production began. Previously, Alaskan output had been declining at an average of about 100 thousand B/D per year.

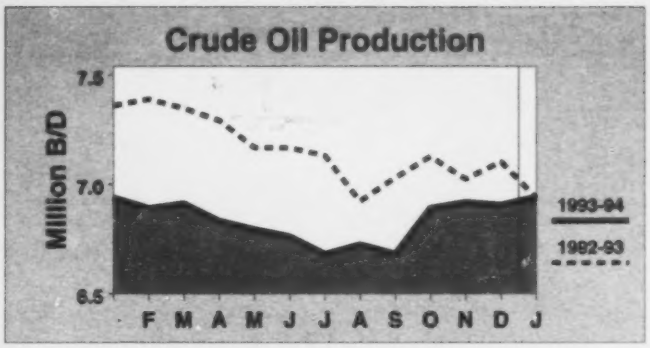
In the lower 48, production declined only about half a percent or 20 thousand B/D from last January. Following the Northridge earthquake, offshore production was temporarily slowed or shut in, but this did not have a serious effect on overall monthly production. Several crude oil pipelines suffered light to moderate damage, causing shutdowns of anywhere from a few days to several weeks.

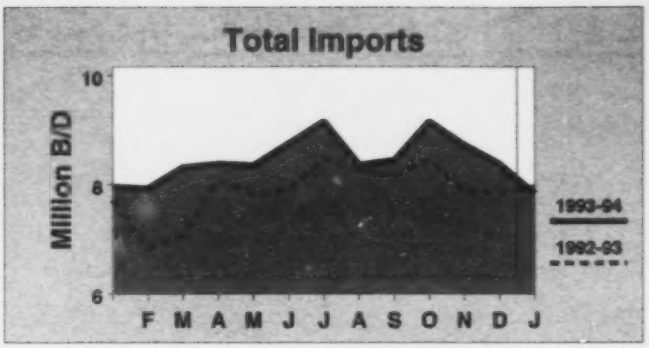
Imports

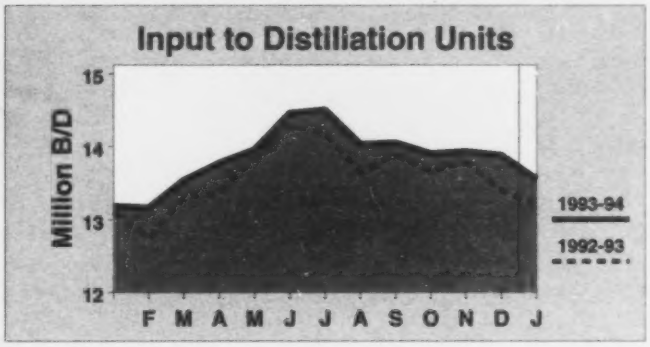
JANUARY'S DECLINE EVADES THE TREND.

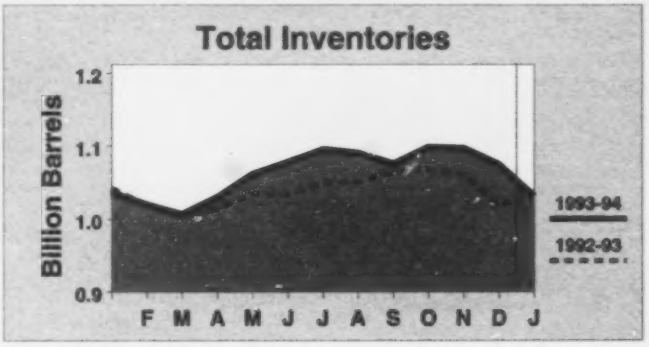
After experiencing robust year-to-year increases during November and December, January imports of crude oil and refined products declined by 133 thousand B/D, or by 1.7 percent compared to a year ago. Although this seems to be an apparent contradiction given that refined product demand surged nearly 12 percent and domestic production did not increase at all between this January and a year ago, increased demand can also be met in other ways, such as drawing on inventories. For the month, inventories were drawn down by 1.4 million B/D which is in contrast to the inventory build of 615 thousand B/D during last year's mild January.

The year-to-year decline in total imports reflects the volatilility of imports that can often make deciphering the underlying trend in









consumption difficult. However, with the month's increase in demand continuing on the upward trend of previous months while domestic production declines, the need for imports has not diminished. Given these trends and that large inventory draws, such as the one experienced this month can also be replenished with increased imports, it is likely that this month's decline in imports was more of a deviation from trend than a reversal.

In contrast to prior months in which increased crude oil imports offset declines in refined product imports, January's increase in refined products were not adequate to offset the decline in crude imports. Crude oil imports were off by 235 thousand B/D while product imports increased by 102 thousand B/D. All major refined product imports showed declines compared to their year-ago levels. At 173 thousand B/D, distillate imports were down approximately 5 percent from their year-ago levels. However, reflecting the seasonal increase for heating oil, imports of distillates were up 31 percent, or 41 thousand B/D, over December's level because of strengthening imports at month-end.

Refinery Operations

DISTILLATE OUTPUT SURGES MORE THAN 11 PERCENT.

Refinery input rose 2.9 percent over last January's level, but a shift in yield patterns resulted in a more than 11 percent year-to-year increase in distillate fuel oil production. Output of kerosine jet fuel, also in demand for blending as a result of the weather, increased over 7 percent. Gasoline output slipped 1.4 percent, and residual fuel oil output fell 2.7 percent. Utilization of capacity amounted to 89.5 percent, up from last January's 87.0 percent.

With highway transport demand typically slowing in mid-winter, low-sulfur diesel production slowed as well from the strong levels of recent prior months. It slipped from nearly 1.8 million B/D in December to just over 1.5 million B/D in January. Output of high-sulfur distillate, including heating oil, rose slightly from December's levels to 1.7 million B/D.

Inventories

TOTAL STOCKS DROP MORE THAN 40 MILLION BARRELS.

Total stocks fell an unusually large 44 million barrels during January compared with the end of December. Although declines are not uncommon in January, the average change for the month in the past five years has been an increase of roughly 10 million barrels.

More than half of the month's decline was in distillate stocks, which fell a substantial 26 million barrels to 119 million barrels. This was three times the average drawdown for January and the largest drop for that month in more than ten years. However, distillate stocks had started the month at 145 million barrels, their highest level for a similar point since 1986. Thus, though month-end distillate stocks of 119 million barrels were 11 million barrels lower than a year ago, they were only slightly below the recent-year average of 121 million barrels.

With lower crude imports and strong refinery runs, crude stocks fell 7 million barrels to a more-or-less typical 333 million barrels. Gasoline stocks rose 8 million barrels, somewhat less than average for January. Gasoline inventory building in January, which has occurred in eight of the ten past years, results mainly from weak seasonal demand. Gasoline stocks have typically declined again in March and April as demand picks up.

ESTIMATED UNITED STATES PETROLEUM BALANCE[1]
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	January 1994[2]	January 1993[3]	% Change	YEAR-TO-DATE 1994[4]	YEAR-TO-DATE 1993[3]	YEAR-TO-DATE % Change
Disposition:						
Total motor gasoline	6,985	6,746	3.5			
Finished oxygenated	2,062	1,645[E]	25.4			
Finished reformulated	0	na	na			
Finished other	4,923	5,101[E]	(3.5)			
Naphtha-jet	80	93	(14.0)			
Kerosine-jet	1,486	1,371	8.4			
Distillate fuel oil	4,088	3,140	30.2			
≤ 0.05 percent sulfur	1,869	328[E]	469.8			
> 0.05 percent sulfur	2,219	2,812[E]	(21.1)			
Residual fuel oil	1,146	1,020	12.4			
All other oils (including crude losses)	4,644	4,094	13.4			
Reclassified[5]	-202	-144	na			
Total domestic products supplied	18,227	16,320	11.7			
Exports	895	1,135	(21.2)			
Total disposition	19,122	17,455	9.6			
Supply:						
Domestic liquids production:						
Crude oil (including condensate)	6,940	6,937	0.0			
Natural gas liquids	1,765	1,728	2.1			
Other supply[6]	1,167	1,441	(19.0)			
Total domestic supply	9,872	10,106	(2.3)			
Imports:						
Crude oil (excluding SPR imports)	6,057	6,292	(3.7)			
From Canada	894	778	14.9			
All other	5,163	5,514	(6.4)			
Products	1,774	1,672	6.1			
Residual fuel oil	375	383	(2.1)			
All other	1,399	1,289	8.5			
Total imports	7,831	7,964	(1.7)			
Total supply	17,703	18,070	(2.0)			
Stock change, all oils	-1,419	+615	na			
Refinery Operations:						
Input to crude distillation units	13,551	13,176	2.9			
Operable capacity	15,145	15,143	0.0			
Refinery utilization[7]	89.5	87.0	na			
Crude oil runs	13,269	12,980	2.2			

	January 1994	December 1993	January 1993	% Change From Month Ago	% Change From Year ago
Stocks (at month-end, in millions of barrels):					
Crude oil (excluding SPR stocks)	333.4	340.5	325.6	(2.1)	2.4
Unfinished oils	99.9	90.8	99.3	10.0	0.6
Total motor gasoline	233.2	224.9[R]	236.6	3.7	(1.4)
Finished oxygenated	27.8	29.7	32.3	(6.4)	(13.9)
Finished reformulated	0.0	0.0	na	na	na
Finished other	162.6	153.8[R]	163.0	5.7	(0.3)
Blending components	42.8	41.4	41.3	3.4	3.6
Naphtha-jet	2.5	2.6	4.8	(3.9)	(47.9)
Kerosine-jet	38.0	38.7	36.3	(1.8)	4.7
Distillate fuel oil	118.6	144.5	130.2	(17.9)	(8.9)
≤ 0.05 percent sulfur	52.9	63.2	22.1	(16.3)	139.4
> 0.05 percent sulfur	65.7	81.3	108.1	(19.2)	(39.2)
Residual fuel oil	44.2	46.3	44.2	(4.5)	0.0
All other oils	160.9	186.3[R]	159.1	(13.6)	1.1
Total all oils	1,030.7	1,074.6[R]	1,036.1	(4.1)	(0.5)

1—Total supply, i.e., production plus imports adjusted for net stock change is equal to total disposition from primary storage. Total disposition from primary storage less exports equals total domestic products supplied. Information contained in this report is derived from information published in the API's *Weekly Statistical Bulletin* and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions. **2**—Based on API estimated data converted to a monthly basis. **3**—Source: U.S. Energy Information Administration (including any adjustments). **4**—Data for most current two months are API estimates. Other data come from U.S. Energy Information Administration (including any adjustments). **5**—An adjustment to avoid double counting resulting from differences in product classifications among different refineries and blenders. **6**—Includes unaccounted-for crude oil, withdrawals from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol, and downstream blending of ethanol. **7**—Represents "Input to crude oil distillation units" as a percent of "Operable capacity". **R**—Revised. **E**—Estimated.